

PATENTS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS: REGIERT ET AL. - 2
SERIAL NO.: 10/712,703 EXAMINER: Eric OLSON
FILED: November 12, 2003 GROUP: 1623
TITLE: COSMETIC COMPOSITION COMPRISING A COMPLEX OF
CYCLODEXTRIN AND VITAMIN F

DECLARATION UNDER 37 CFR 1.132

I, Marlies REGIERT, declare:

1. I am a named inventor of the invention described in the above-identified patent application, and am familiar with the subject matter discussed therein.
2. I am employed by Wacker-Chemie AG in Burghausen, Germany, as the Head of Technical Marketing in the Division of Global Business Development and Sales of Cyclodextrin for Personal Care/Cosmetic, Flavor/Fragrance. I am a certified engineer.
3. I conducted an experiment to test the UV stability of complexes of Alpha-CD and Linoleic acid at various ratios, to compare how the different ratios affect the stability of the complexes.

4. I prepared samples of Alpha CD/Linoleic acid in the ratios of 3:1, 4:1, 5:1, 6:1, 11:1, 18:1 and 32:1. These samples were prepared as described in Example 1 of the specification.

5. The samples were placed on a sample table. A xenon lamp was used to generate UV A and UV B radiation. The radiation was filtered through an optical filter of coated quartz shell. The part of the UV A/B radiation that was directed up was reflected onto the sample by mirrors attached above the xenon lamp. If substances such as cosmetic active ingredients are subjected to UV A/B radiation, this often leads, depending on the time, to degradation of the product, even in the case of linoleic acid, or to a lesser extent, to the linoleic acid content of complexes with alpha-cyclodextrin.

6. In each case, 5g of each of the complexes of alpha-cyclodextrin with linoleic acid was inserted between two glass plates. The edges of the glass plates was sealed with sticky tape and exposed in a SUN test apparatus (ATLAS Material Testing Solutions) to the UV light at a wavelength of 290-320 nm UV B radiation and 320-400 nm UV A radiation over a period of seven days. The SUN-Test device was fitted with this purpose with a

solar standard filter (in accordance with COLPA and DIN 67501). This filter excludes UV C rays, so that only UV A and UV B radiation reaches the sample. After the defined periods, the content of linoleic acid in the complexes was determined by NMR.

7. The results are shown in FIG. 1. These results clearly show that the complexes having a 3:1 or 4:1 ratio of alpha CD to linoleic acid have a higher UV stability than complexes with a higher alpha CD content.

8. I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereto.

Date: 19.08.2003

i. V. Marlies Regiert
Marlies REGIERT

Fig. 1

UV-stability of linoleic acid/alpha-CD-complex

